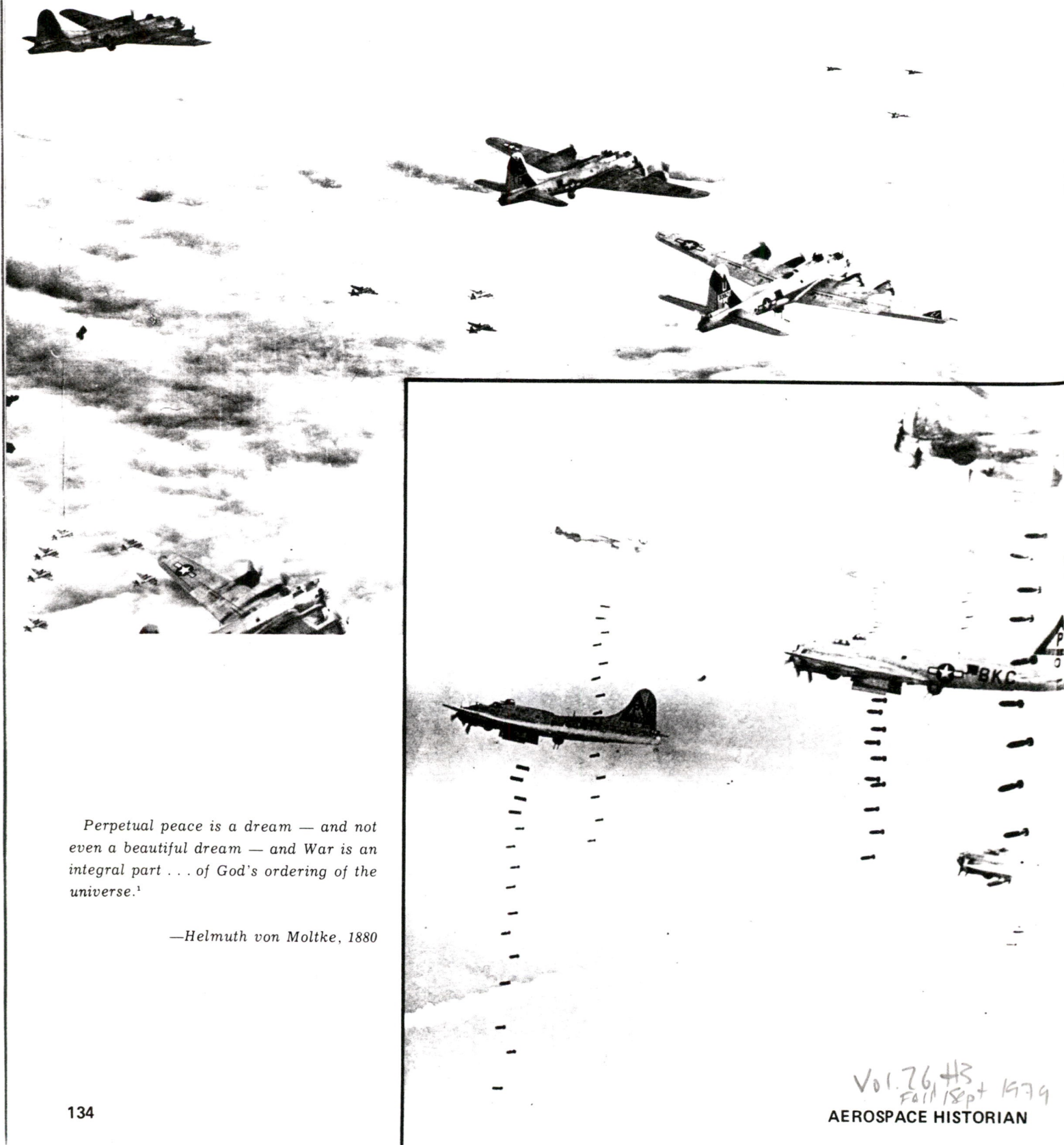


# Culmination Dresden: 1945

by Mark A. Clodfelter



*Perpetual peace is a dream — and not even a beautiful dream — and War is an integral part . . . of God's ordering of the universe.<sup>1</sup>*

*—Helmuth von Moltke, 1880*

Two hundred years of technology has done much to return the nature of warfare from the "limited" status it supposedly enjoyed in the 18th century to that it had before 1648. One result of this broadening of conflict from strictly military spheres to operations directly affecting the civilian population has been a cry of moral injustice from concerned politicians, humanitarians, and theologians, as well as from propagandists. It is this moral outcry that often has guided the military leaders of the United States throughout the nation's history. The issue of "moral warfare" is still very evident; one needs only to examine the current debate on the neutron bomb, or to look back to the controversial bombing of North Vietnam.

Possibly at no other time did the issue of morality serve to temper the judgments of America's military chiefs more than during the strategic bombing campaign against Germany in the Second World War. The attacks on Dresden in February 1945 remain a focal point of controversy in a campaign whose ultimate value in winning the war is still debated. In this essay, the author makes no moral pronouncements, but rather seeks only to depict accurately the events surrounding the fateful Dresden raids — with a special emphasis on those incidents leading to the decision to bomb the city.

**I**N a cloud-filled sky above southeastern Germany on the night of 13 February 1945 the veteran crews of over 200 Lancasters of the Royal Air Force made their final checks before approaching the target.<sup>2</sup> Ahead of the formation, the master bomber and his eight accompanying Mosquitoes searched vainly for a hole in the cloud covering. The raid was to be another in a continuing series of area attacks against the remaining cities of Hitler's dwindling Third Reich. The target — Dresden, capital of Saxony and the seventh largest city in Germany.<sup>3</sup>

As the Lancasters lumbered nearer the city, the clouds remained dense. Suddenly, however, almost as the bombers were over target, the covering vanished and the lights of the city appeared below. Instinctively the master bomber led his Mosquitoes low over Dresden and, by a combination of both skill and luck, planted his marker in the Sportpalast south of the Elbe River and adjacent to the city's most populous residential district. "Bombs away," came at 2103, and for the next hour and twenty-five minutes the medieval town of the Saxon kings, renowned for its beautiful china, received a bombardment similar to that which earlier had befallen Berlin, Bremen, and Hamburg.<sup>4</sup>

When the attack ended shortly before 2230, it signaled not a halt, but merely a lull. A larger force of Lancasters, over 500, was making its way across the north German

coast before the last of the first wave of bombers had attacked. By the time this second force approached the city, the crews realized that they would have no difficulty in selecting their aiming points — Dresden was a conflagration. Like their predecessors, the crews received no harassment from either flak or night fighters. Unknown to the Allies at the time, the Germans had removed all of the anti-aircraft batteries guarding Dresden for use against the oncoming Russians. The German night fighters had received such little warning of the first RAF raid that they did not have sufficient time to attain the necessary altitude to attack the bombers. And despite the planes being prepared for the second raid, fuel shortages prevented the order to take off, and the planes sat on the runway. Furthermore, the first raid had destroyed all communication with headquarters.<sup>5</sup> By 0200 over 1,471 tons of high explosive bombs and 1,175.7 tons of incendiaries had been dropped on the city.<sup>6</sup>

For the dazed inhabitants of Dresden — a town then choked with refugees fleeing the advancing Russians — the RAF's double attack must have seemed to be a 20th century version of Sodom and Gomorrah. Little did the survivors realize, however, that as they crawled out of the rubble, the crews of over 400 B-17s of the U.S. Eighth Air Force were receiving a final briefing on the difficulties involved in bombing the Dresden marshalling yards. When the Americans approached their target in the morning of 14 February, they were directed by a smoky black haze which arose from the ruins and mingled with the clouds that had returned.

Although the original target had been the vast marshalling yards on the southern bank of the Elbe, this target had been changed as the planes crossed the English Channel because of the heavy clouds over the continent. As the bombers progressed, the cloud covering thickened, until finally,

by the time the B-17 crews could see the smoke of their objective, the target had been altered once again to a rail junction in the center of the city.

The target priorities for the raid, according to the 92nd Bomb Group mission reports, were as follows: (1) primary visual — Dresden marshalling yards; (2) MPI — the center of the marshalling yard at a point east of the station house; (3) secondary visual — the marshalling yard at Chemnitz, Germany; (4) MPI — the station house at the end of the line in the center of the town (of Chemnitz); (5) secondary PFF — a rail junction in the center of the town of Dresden, 1,000 yards northwest of the visual MPI; (6) last resort — the machine fabric plant at Plauen, Germany; (7) MPI — a warehouse in the center of the target area (Plauen); (8) target of opportunity — first six pair on center of city, last six on target. The teletyped statement of the last resort target stated, "Any military objective definitely identified as being in Germany and east of the current bomb line." Target 5, the rail junction, which was finally selected, *did* lie in the center of the city — as did the marshalling yard; however, neither this target nor the yard were in the main residential district.

When the lead bombardier dropped his bombs, he was not over the supposed aiming point but was instead, because of poor visibility, over the main residential area which already had been bombed by the RAF hours before. (The Eighth Air Force bombed Dresden using Pathfinder (PFF, for Pathfinder Forces) methods, similar to those of the RAF.)<sup>7</sup>

Capt. John J. O'Connell, Intelligence Officer for the 379th Bombardment Group which participated in the raid, commented that "All three of our squadrons bombed Dresden visually through about 7/10's cloud cover."<sup>8</sup> But in a photographic intelligence report summary of Dresden's

*Opposite, top: B-17 Flying Fortresses of the 8th AF over the marshalling yards at Salzwedel, Germany, 22 Feb. 1945.*

*Below: B-17s of the 8th AF rain down bombs on a German escape route on 17 Apr. 1945. Over 1,000 B-24s and B-17s attacked three Dresden railway centers as well as railway targets and oil storage depots in Czechoslovakia.*



Maj. Gen. F. L. Anderson (l), Deputy Commanding General of USAAF in Europe, April 1945, with Sir Charles Portal, RAF Chief of Staff, and Sir Archibald Sinclair (r) (Crown photo).

damage a month later, the weather for the 14 February raid was listed as "clear."<sup>8</sup> O'Connell had believed that the bombs had fallen in or nearby the marshalling yard; however, the bombs from the 379th had, like those of the other groups, missed the yards completely. Actually, the east end of the Dresden marshalling yards was struck by perhaps three to four bombs which formed the southernmost point of a singular pattern falling from north to south and beginning near the Elbe River above the yard. These were a string of high-explosive bombs; all of the incendiaries and the remainder of the high explosives fell to the southeast of the yards on the residential area which had been hit by the RAF.<sup>9</sup>

Over 700 tons of bombs were dropped on the city by 311 Eighth Air Force B-17s.<sup>10</sup> The next day, the Eighth again attacked the city's marshalling yards, but once more cloud cover prevented accurate bombing. Over 400 tons of explosives fell upon Dresden,<sup>11</sup> but the results were unobserved.

Although the Saxon capital had been bombed twice by the Eighth Air Force prior to the February raids, the damage done was slight. But the double raid by the RAF and the subsequent attacks of the Eighth Air Force proved catastrophic. Packed with the horde of refugees from the Russian front, the city received no warning of the RAF strike until four minutes before the first bombs began to fall. No ventilated concrete bunkers existed within Dresden to protect those persons who might have reached shelter.<sup>12</sup> As a result, 35,000 people died during the two and one-half day span, though the initial reports placed the death tolls much higher.<sup>13</sup> The Swedish newspaper *Expression* reported 70,000 dead on 16 February;<sup>14</sup> after the war, the United States Strategic Bombing Survey esti-

mated the number of deaths at 305,000.<sup>15</sup> The Commander of the Dresden Civil Police estimated 500,000 people were rendered homeless by the RAF raids and the first Eighth Air Force attack.<sup>16</sup>

The military effectiveness of the attacks proved more difficult to gauge. Joseph Angell wrote in his treatise on the Dresden bombings: "The geographical and topographical importance of Dresden as the lower bastion in the vast Allied-Russian war of movement against the Germans in the closing months of the war can . . . scarcely be overestimated."<sup>17</sup> In addition, the city was the hub connecting the two major rail lines between Berlin and Leipzig and thus served as a key troop concentration area. This importance as a transportation center was the major reason for the American plan to attack the marshalling yards. However, only three or four bombs hit the marshalling yards on the first Eighth raid, and the attack of 15 February, where once again bombardiers could barely see the city, much less the rail yards, similarly achieved only minor success. Forty-eight hours later, in fact, the damage caused by the raid was repaired, and trains once again ran through Dresden.

The British motive for the Dresden attack also can be found in the Angell synopsis, as Dresden in February 1945 contained at least 110 factories that were legitimate military targets and had reportedly 50,000 workers in arms plants alone.<sup>18</sup> As a large industrial city — and a relatively undamaged one — Dresden was a likely choice for an RAF area attack. By destroying the homes and livelihoods of the factory workers, the British felt such a raid would further collapse the sagging German civilian morale. However, although the attack did cause confusion by forcing the evacua-

tion of thousands of people who lost their homes, vital services ultimately were repaired. And although the abrupt harshness of the attacks shocked the inhabitants, it did not cause a breakdown of the city's morale. Instead, the survivors cleared away the rubble and returned to their jobs as soon as conditions permitted.

The British, nevertheless, felt the raids were a success, and by 15 February 1945 Dresden was slipped to 62nd on the RAF priority targets list.<sup>19</sup> The RAF never again attacked Dresden. The American planners, on the other hand, wrote the members of the U.S. Military Mission in Moscow on 18 February that Dresden was second in priority among Army Air Force transportation targets in Europe.<sup>20</sup> Accordingly, on 2 March and 17 April, the Eighth Air Force again attacked the Dresden marshalling yards, finally pulverizing the rail center in the latter raid.<sup>21</sup>

**I**N the United States, the initial press reports of the bombing of Dresden created consternation among several senior American military chiefs and civilian officials. The issue was ignited by RAF Air Commodore C.M. Grierson, who in a press conference on 15 February 1945 in Paris candidly answered reporters' questions concerning the Dresden raids in specific and strategic bombing policy in general as he understood it. A summary of Grierson's statement was written by Gen. Carl Spaatz's Deputy Commander of Operations, Maj. F.L. Anderson:



RAF Air Commodore C. M. Grierson, Assistant Chief of Staff, Int., SHAEF, at the Copenhagen Airport, June 1945 (Crown photo).

The effect of the heavy raids on population centers has always been first of all to cause the Germans to bring in train loads of supplies of extra comforts and take away the population which have been rendered homeless. Now that the form of relief relies very, very much to a pretty great extent on rapid and sound communications between the big cities and the whole of the interior of Germany itself, so that the destruction of not only communications centers, but also of the towns where the relief comes from and where the evacuees go to, are very definitely operations which contributes [sic] greatly toward the break up of the German economic system.

Concerning the recent bombing of Dresden, Major Anderson wrote that the Air Commodore replied that the attacks on Dresden and the other targets near the Russian Front were "the result of recommendations made by the combined strategic targets committee." Anderson reported that Grierson stated the reason for such attacks was:

First of all they are the center to which evacuees are being moved. They are the centers of communication through which traffic is moving across the Russian Front, and from the Western Front to the East, and they are sufficiently close to the Russian Front for the Russians to continue the successful prosecution of their battle.

Anderson's report shows that Grierson concluded by saying that the principal aim of such attacks as Dresden would be to stop communications carrying military supplies rather than to create confusion among refugees.<sup>22</sup>

The effect of Grierson's remarks was immediate. On 18 February AP correspondent Howard Cowan wrote on page one of the *Washington Star*, "The Allied Air Commanders have made the long awaited decision to adopt the deliberate terror bombing of the great German population centers as a ruthless expedient to hasten Hitler's doom." Cowan's article further said:

More raids such as the British and American heavy bombers carried out recently on the residential sections of Berlin, Dresden, Chemnitz, and Cottbus are in store for the Reich, and their avowed purpose will be creating more confusion in the German traffic triangle and sapping German morale. . . . The allied view is that the bombardment of large German cities creates immediate need for relief. This is moved into the bombed areas both by rail and road and not only creates a traffic problem but draws transport away from the battlefield. Evacua-

tion of the homeless has the same result.<sup>23</sup>

By combining Grierson's opinions with a Hearstian flair for the sensational, Cowan caused an uproar in the American high command. Arnold immediately cabled Spaatz from Washington on the 18th demanding an explanation, saying,

In view of the foregoing [the Cowan article] it is desired that you transmit as a matter of urgency the specific text of your present directive to USSTAF, together with any further comments in order to clarify in my mind completely the entire present situation as to directives and priorities for strategic bombing.<sup>24</sup>

Spaatz replied on the 19th, saying Cowan's article was an exaggeration of

Grierson's statements, which had slipped past the censors. "We have not, or do not," retorted Spaatz, "intend to change the basic policy which has governed the direction of effort of the United States Strategic Air Forces in Europe from the time they first started operations in this Theater. Our attacks have been in all cases against Military objectives."<sup>25</sup>

Arnold was not, however, the only one in Washington upset over the Cowan dispatch. Upon reading the article, Secretary of War Stimson turned to Army Chief of Staff George Marshall and demanded a complete account of the raid. Marshall went to Gen. Barney Giles, who in turn also called Spaatz. By 6 March, Marshall could write a memorandum to Stimson; however, it is not clear where the Chief of Staff obtained all of his information. The report errone-



Lt. Gen. Carl A. Spaatz talks with Secretary of War Henry L. Stimson at a base somewhere in North Africa.

ously stated that a 4 March (the actual date was 15 February) London announcement named Dresden "as the center of a railway network and a great industrial town;" one which "has become of the greatest value for conducting any defense which the Germans may organize against [Russian] Marshal Konev's armies." The report further stated that Dresden was "closely related with the German potentialities for launching a counterattack against the southern wing of the great Russian Bulge."<sup>26</sup>

The report noted that in the Eighth AF raid of 14 February:

Dresden was bombed by 311 U.S. heavy bombers. The target was the

marshalling yard and both H2X and visual methods were used. Visual results appeared excellent.<sup>27</sup>

One would think that by 6 March, almost a month after the raid, Marshall would have been aware of the Eighth Air Force's inability to bomb the marshalling yards through the clouds on 14 February. The photographic intelligence reports — which showed that the Eighth had missed the target — were available on 15 February. The report did state, however, that the results of the 15 February raid were unobserved.<sup>28</sup>

Stimson replied to the COS's memorandum with skepticism, and penciled in across the bottom:

I doubt this report makes the case any better — on the face of it the British on Feb. 13 bombed the city. While our bombing was said to be aimed at military objectives the results were practically unobserved. I think the city should be photographed carefully and the actual facts made known.<sup>29</sup>

Stimson continued to demand facts on the Dresden bombing, until finally he received information directly from Spaatz's headquarters in Europe. The Secretary of War then made no further comments on the raids.<sup>30</sup>

Inside the United States, little public outcry was heard over the attacks. The re-



Heavy incendiary bombs and explosives fall toward Dresden, 14 Feb. 1945, as U.S. 8th AF heavies attack following the RAF night blow. Fires from the RAF attack were still burning as the day bombers struck.

sponse to the raids can be likened to that achieved by author Vera Brittain's biting condemnation of the strategic bombing of- fensive, "Massacre by Bombing."

... the distinction between obliteration and precision bombing by 1944 had been lost in the minds of most Americans. Whatever bombing was militarily necessary to win the war must be done. To call into question obliteration bombing was to call into question all bombing and the whole war effort itself.<sup>31</sup>

Whereas in America the initial press re- ports created a near panic in high military and governmental positions over the Dres- den bombings, in Britain the Churchill re- gime strictly prohibited journalists from jeopardizing public support for the war. Only in Parliament were the raids men- tioned, and it was through the especially bitter attacks in the House of Lords leveled at Air Chief Marshal Sir Arthur Harris' area raid policy that the British public learned of the magnitude of the Dresden assault. This criticism of Harris gradually transformed the overwhelming public sup- port given the Bomber Command leader in 1942 into scorn — after the war Harris was one of the few commanders in the British forces who was not ennobled in apprecia- tion for his efforts. However, reflecting back upon the Dresden raids in his book *Bomber Offensive*, Harris disclaimed ul- timate responsibility for the attacks. Commented the former AOC-in-C of Bomber Command: "The attack on Dres- den was at the time considered a military necessity by much more important people than myself . . . ."<sup>32</sup>

The man whom Harris probably had up- permost in his mind when he made that

statement was one who often felt wartime political decisions to be military neces- sities, Winston Leonard Spencer Churchill. But on the night of 28 March 1945, the Prime Minister himself was having second thoughts about the wisdom of bombing the Saxon capital. That night Churchill wrote the following memorandum to his Chief of Staff, General Ismay:

It seems to me that the moment has come when the question of bombing of German cities simply for the sake of increasing the terror, though under other pretexts, should be re- viewed. Otherwise, we shall come into control of an utterly ruined land. We shall not, for instance, be able to get housing materials out of Ger- many for our own needs because some temporary provision would have to be made for the Germans themselves. The destruction of Dres- den remains a serious query against the conduct of Allied bombing. I am of the opinion that military objec- tives must henceforward be more strictly studied in our own interests rather than that of the enemy.

The Foreign Secretary has spoken to me on this subject, and I now feel the need for more precise concentra- tion upon military objectives, such as oil and communications behind the immediate battlezone, rather than on mere acts of terror and wanton de- struction, however impressive.<sup>33</sup>

Two months earlier Churchill had been Britain's leading proponent of pulverizing the German cities on the Eastern Front with area attacks, but under the weight of Parliamentary denouncement and public disapproval, the Dresden raids had stricken even the Prime Minister's stoic conscience.

With the end of the European phase of the Second World War in May 1945, the concern that existed in America abated in the face of the Twentieth Air Force's titanic onslaught against the Japanese. Indeed, even as Stimson was demanding a com- plete account of the Dresden raids from Spaatz, Gen. Curtis Lemay's B-29s deliv- ered 2,000 tons of fire bombs against Tokyo in history's most savage air attack.<sup>34</sup> But following victory in the Pacific and the birth of the Cold War, Dresden once again became an issue of concern for high Ameri- can officials, as the Russians "with in- creasing frequency and by means of dis- tortion and falsification used the February 1945 Allied bombings of Dresden as a basis for disseminating anti-Western and anti- American propaganda."<sup>35</sup> In response to the Soviet accusations, a treatise entitled "Historical Analysis of the 14-15 February 1945 Bombings of Dresden" was written by Joseph Angell. He stated:

It was the specific Russian request for bombing communications,

coupled with the emphasis on forcing troops to shift from west to east through communications centers, that led to the Allied bombings of Dresden.<sup>36</sup>

Interest in the Dresden raids did not sub- side, however, and in 1963 American and British readers were aroused by the publi- cation of historian David Irving's contro- versial best seller, *The Destruction of Dresden*. In his book Irving placed the total German casualties for the two raids by both the British and the Americans at 135,000.<sup>37</sup> Although this figure was later reduced to 25,000 in a letter to *The [London] Times* in 1966, Irving's work — combined with a growing American discontent with the bombing of North Vietnam — touched off a rash of publications on the raids. Perhaps one of the most spectacular depictions of the strikes came in Kurt Vonnegut's fic- tional *Slaughterhouse Five*, which was subsequently made into a motion picture.

This controversy over Dresden still con- tinues, and probably will for some time to come. The immense destruction wrought against a virtually undamaged city, at a time when the Allied political leaders were reasonably certain of eventual victory, poses questions which may never be fully answered. However, to question the mor- ality of the attacks on the city of Dresden in February 1945, one first would have to ad- judge not only the Combined Bomber Of- fensive, but also the Allied doctrine of un- conditional surrender, which served to guide bombing policy to an even greater degree as the war progressed. Dresden was not a singular sort of terror raid designed by Allied political and military chiefs; rather, it was the logical culmination to a doctrine espoused earlier by Gen. William T. Sherman in his march from Atlanta to the sea — total war.

WITH the invention of the air- plane in 1903, the ability to wage total warfare against an enemy assumed a new and dramatic dimension. The Ger- mans were the first to realize the flying machine's potential for carrying war di- rectly to an enemy's production centers, and when the Great War began in earnest in August 1914, they had six squadrons desig- nated specifically for the bombardment of London. These efforts to bomb the British capital intensified as the war progressed, first by using Zeppelins to bomb the city and finally — when the Zeppelin attacks proved too costly — by employing a fleet of Giant and Gotha bombers. Although these attempts produced little material damage, the raids made a profound impression upon the Allied disciples of air power who searched for a means to break the deadlock of trench warfare and secure a victory.<sup>38</sup>



Air Chief Marshal Sir Arthur Harris, April 1944 (Crown photo).

The faith of the air power enthusiasts in the ability of the airplane to gain the victory which was seemingly impossible through ground combat was embodied in the writings of Italian air marshal Giulio Douhet. In 1921 Douhet had published his revolutionary book, *The Command of the Air*, proclaiming that air power directed against an enemy's population centers could, *by itself*, win wars. This victory would be obtained not through the destruction of an enemy's ability to wage war — though this certainly would be a factor — but rather through the destruction of an opponent's will to resist. Douhet stated:

Necessarily, a complete dissolution of the national governmental structure will take place following severe air raids. It will not be long before the population, driven solely by an instinct for self-preservation, will demand the cessation of hostilities at any price, perhaps even before the mobilization of the army, or before the fleet has left its harbors.<sup>39</sup>

In Britain, the future of air power was also being prophesied by the man who was influential in the creation of the Royal Air Force — Air Marshal Sir Hugh Trenchard. The field commander of the RFC, 1915-1918, and first and third Chief of Staff of the RAF, Trenchard was at first opposed to grand strategic bombing, becoming converted only after Generalissimo Ferdinand Foch of France became in favor of it in 1921. By 1927 Trenchard felt that future efforts similar to the German attacks on Britain could have decisive results.

Trenchard's ideas as to what constituted the sources of enemy strength were only loosely defined, but it is certain that he regarded the moral effect of bombing — that is . . . the effect upon the people being bombed — as much more important than the material — that is, the systems such as marshalling yards and power grids, or structures such as oil plants and factories.<sup>40</sup>

The Air Marshal's ideas were to serve as the foundation of British bombing policy in the Second World War.

While Trenchard guided air power doctrine in Britain, in the United States the supporters of air power turned both to Douhet and to a flamboyant American who directed Pershing's air efforts in World War I, William Mitchell. The strategic bombing theories of both Mitchell and Douhet inspired the instructors at the Air Corps Tactical School, founded in 1921. Accordingly, strategic bombing was stressed, and instructors at the school came to feel that it was through this unique mission that an independent air force could be created.



Marshal of the RAF Sir Hugh Trenchard reviews troops of the 303rd Bomb Group at a U.S. airbase somewhere in England.

By the 1930s, demand for an independent service had grown, and many argued that strategic bombing was the key to the quick victory that had been absent from the First World War. Through the bombing of "vital centers," an enemy nation, they maintained, could be hampered so severely that it could not supply its troops in the field with needed equipment. Furthermore, the attacking nation's air force would be "at liberty to proceed directly to the accomplishment of the ultimate aim in war: overthrow of the enemy will to resist through the destruction of those vital elements upon which modern social life is dependent."<sup>41</sup>

The ideas of Douhet, Trenchard, and Mitchell received their first tests following World War I during the invasions of China and Ethiopia. The results of bombing aimed at the civilians in the two countries proved difficult to judge, however, as both the vast number of Chinese population centers and the limited number of cities in Ethiopia made the effects of city-bombing questionable in either case.<sup>42</sup> But with the outbreak of the Spanish Civil War in 1936, the opportunity to demonstrate fully the theories of Douhet became possible. The bombing of Guernica by the Kondor Legion

of Hitler's Luftwaffe was the first attempt of the war to batter a city's population into submission; by the end of the conflict both sides would resort to using terror raids. But though the attacks were damaging to Spain's civilian population,<sup>43</sup> their ability to cause the moral collapse of a city's inhabitants proved doubtful. American Ambassador Claude G. Bowers wrote from Madrid in 1938:

The apparent purpose of testing aviation as an instrument for the breaking down of morale of the civil population has probably resulted in some disillusionment. Judging by the events in Spain, instead of breaking down the morale, the effect seemed to be very perceptibly a stiffening of the morale of the people — a rise in their resentment.<sup>44</sup>

But the lessons of Spain went unheeded by many. Little more than a year after the fall of Madrid, Adolf Hitler threw away his chance for victory in the Battle of Britain by ordering the Blitz against London, apparently believing that this action would crush the will of the British to continue fighting. Although subjected to a tremendous pounding, London and other British

target cities did not witness a sagging of morale, and the unhindered RAF rose to inflict the Luftwaffe's first defeat.<sup>45</sup>

Shortly after Britain entered the Second World War, Prime Minister Neville Chamberlain had declared that

Whatever be the lengths to which others may go, His Majesty's Government will never resort to deliberate attack on women and children, and other civilians for purposes of mere terrorism.<sup>46</sup>

As the situation on the Western Front deteriorated, however, the RAF bombed the German city of Freiburg, a full four months before Hitler's Blitz on London.<sup>47</sup> But during the time prior to the Luftwaffe's accidental bombing of London on the night of 24 August 1940, Bomber Command raids were usually limited to specific military targets. British losses on such attacks were costly; the RAF lacked a bomber capable of defending itself against German fighters, and the short range of both the Hurricane and the Spitfire prevented their use as escorts. Also, the British found themselves plagued by a poor bombsight that hampered their ability to hit precision targets. (Even after the U.S. entered the war, the Americans refused to allow their British allies to use the excellent Norden bombsight.) But once the French surrendered in June 1940, Bomber Command remained Britain's sole instrument with which to strike back at the Germans.

On 7 September 1940, the Luftwaffe began a concentrated assault on London that did not end until the summer of 1941. The British public and Winston Churchill were incensed. On 25 October 1940, Air Marshal Sir Richard Peirse, AOC-in-C Bomber Command, received an order to concentrate on two objectives: oil and morale.<sup>48</sup> The ultimate responsibility for this directive most probably came from Churchill. The RAF responded to the order with its first "area attack," conducted on the night of 16 December 1940 against Mannheim, Germany. The high losses that had occurred in the early stages of the war had prevented further efforts by daylight, and the British maintained the policy of bombing at night, with the exception of a brief period in 1941, for the remainder of the conflict. The motive behind the British area attacks was not purely revengeful, however.

The idea for city attacks developed partly from British experiences in the blitz on England where it was discovered that German attacks on cities affected not only the lives of the people and their morale but also industrial production. City life and services were disrupted to an important extent. In Liverpool it was found that great damage was done to the docks by incendiaries . . .<sup>49</sup>

A new directive was issued to Bomber Command on 14 February 1942 — exactly three years before Dresden — announcing the primary objective of future raids as the morale of the enemy civilian population, especially that of the industrial workers.<sup>50</sup> Eight days later, Harris replaced Pierse as the head of Bomber Command, and the area bombing campaign against the German civilian population began in earnest.

Aided by the arrival of the four-engined Halifaxes and Lancasters, Harris set about with a Sherman-like zeal to destroy the major cities of the Third Reich. On the night of 28 March 1942, the RAF struck a heavy blow at Lübeck, using large numbers of incendiaries to start fires in the heavily built-up residential section of the city. Lübeck was a city on the Baltic Sea that was felt by Harris to be an easy target for his crews to locate. Bomber Command was still plagued by its inability to hit a specifically defined target; by bombing on such a large area as the lights of a city's residential district, the chances of hitting the point aimed at were greatly improved.<sup>51</sup>

On 30 May, Bomber Command followed against Cologne with the first of its famed "thousand-plane" raids and caused widespread destruction. The RAF continued its night attacks into the next year, and at the end of July 1943 scored its greatest success against Hamburg, where, aided by the American Eighth Air Force, a fire storm killed 3.3 percent of the city's population.<sup>52</sup> The *USSBS Area Studies Report* succinctly describes the plan of attack used in area raids such as those on Lübeck, Cologne, Hamburg, and Dresden.

In determining the aiming point for city attacks, Bomber Command prepared a zone map of the city based on aerial photographs. Administrative and residential areas between 70 and 100 percent built-up were outlined in red. Similar areas between 40 and 70 percent built-up were outlined in green. Major railroad facilities were outlined in buff and industrial areas in black. In most German cities the black areas lay largely on the perimeter. Area attacks on a previously unbombed city [as in the case of Dresden] were aimed at the center of the red area, while subsequent attacks on the same city were usually directed against the center of the most heavily built-up areas which remained undestroyed.

However, certain intangibles entered into the process of selecting cities as targets. Among these were:

The emotional satisfaction in seeing a sizable section of the built-up area of an enemy city destroyed. . . . A greater proportion of the crew members had the satisfaction of seeing hits on the target. The Commander-in-Chief Harris had evi-

dence of widespread destruction of enemy property.<sup>53</sup>

The British attempt to crack the German morale, however, did not produce overwhelming results, though it did kill large numbers of people and destroy many structures. The attacks did affect war production somewhat, according to the *USSBS Area Studies Report*. Page 6 of the *Report* cites two effects on production, caused by the raids:

Direct production loss (resulting from interference with production due to labor absenteeism and from damages to factories and machines), and Indirect production loss (resulting from the diversion of labor and productive machinery to the repair and replacement of industrial buildings, plants, inventories, dwellings, and household goods.)

Yet after the disastrous raids on Hamburg, the city's local newspapers carried notices that not only listed the casualties from the air attacks but also listed those German soldiers from Hamburg who had been killed in the Russian counterattack at Stalingrad, and despite this double tragedy, "there was no noticeable decline in industrial production nor were there important political repercussions."<sup>54</sup>

**I**N contrast to the British, the Americans entered World War II as the premier advocates of precision bombing, a doctrine that traced its foundation to Billy Mitchell and the planners of the Air Corps Tactical School. Though such instructors as future generals Harold L. George and Haywood S. Hansell held that the strategic bombing of cities might possibly break an enemy's morale, they placed more emphasis on the airplane's ability to bring victory by destroying select industrial targets and hence restricting an opponent's war-making potential. AWP-1, which guided the American bombing effort during the war, reflected a precision philosophy. The directive listed the German electric power, transportation, and oil and petroleum systems as the primary objectives for the American bomber forces.<sup>55</sup>

The Eighth Air Force, commanded first by Carl Spaatz and later by both Ira Eaker and James Doolittle, when Spaatz was moved up to direct all Army Air Forces in Europe, was to be the instrument that helped attain the objectives of AWP-1. But before the Eighth could make a serious effort against Germany's vital services, it first had to defeat the Luftwaffe, a task that was not accomplished until February 1944 in the ARGUMENT operations dubbed "Big Week." Eisenhower then claimed control of the Eighth, and Bomber Command as well, despite the objections of both



Gen. Carl Spaatz (l), Secretary of War Henry L. Stimson, and Lt. Gen. James H. Doolittle on a catwalk of the 351st Bomb Group control tower in England, 19 July 1944.

Spaatz and Harris, to assist directly with the Normandy invasion. The Supreme Allied Commander did not return control of the United States Strategic Air Forces to the Combined Chiefs of Staff until August 1944. From that time until April 1945, the Eighth Air Force concentrated on oil, communications, and transportation targets. The 'round-the-clock bombing that had resulted by the end of the war, however, blurred the effectiveness of the precision attacks until they had come to resemble the area raids of the RAF in their consequences.

To find the reason for this daily American effort that led to an outcome which paralleled that of Bomber Command, the Combined Bomber Offensive Directive of January 1943 and the military situation in

October 1944 must be examined. At Casablanca in early 1943, Eighth Air Force and Bomber Command leaders jointly resolved to begin an air offensive against Germany aimed at "the progressive destruction and dislocation of the German military, industrial, and economic system, and the undermining of the morale of the German people to a point where their capacity for armed resistance is fatally weakened."<sup>56</sup> Also at this Casablanca conference, Franklin Roosevelt and Winston Churchill announced that the war would be pursued until the *unconditional* surrender of the Axis powers was effected. By making such a statement, the Allied leaders went far toward condoning the 24-hour bombing of the Reich that occurred less than two years later.

The military situation that confronted the Allies in the autumn of 1944 was not pleasant. Germany appeared destined for defeat, but the knockout blow could not be delivered. Montgomery's plan for crossing the Rhine foundered at Arnhem, and when on 16 December the Germans struck with unexpected force in the Ardennes, the Allied High Command was shocked. As a result of the deteriorating ground situation, both Spaatz and Harris tried to aid the American and British armies to the fullest extent with day-by-day attacks against Germany — even if this meant bombing during poor weather conditions.<sup>57</sup> The German nation obviously possessed the means and the will to continue to resist, and by so doing, made an early unconditional surrender difficult for the Allies to attain. The intent to use air attacks by the Eighth Air Force to accomplish the objectives of AWPD-1 still remained, but in the words of one writer, "... now a club was fashioned from what had been intended as a sword."<sup>58</sup>

As the Allied armies reached an impasse on the Western Front in the fall of 1944, members of the Joint Intelligence Committee searched for plans to end the war. One such plan scrutinized by the committee was an operation proposed by Air Chief Marshal Portal of the RAF in August 1944. Code-named *Thunderclap*, it called for a mammoth air attack (20,000 tons of bombs to be delivered in four days and three nights) against Berlin and other selected German cities at a time when the German will to continue fighting appeared ready to break. The purpose of this assault would be to force the German civilians to demand a surrender from their Nazi leaders.<sup>59</sup> The bombing could take place even in bad weather, because of the city's size. However, with further consideration of the plan, Air Marshal Portal determined that Allied bomber casualties would be heavy because of the German capital's strong defenses. He, therefore, concluded his *Thunderclap* plan with the suggestion that "Immense devastation could be produced if the entire attack was concentrated on a single big town other than Berlin and the effect would be especially great if the town was one hitherto relatively undamaged."<sup>60</sup>

On 6 October 1944, the Joint Intelligence Committee reviewed Portal's plan and supported his conclusions. But the Committee pointed out that benefits other than a swifter end to the war might accompany such attacks. "It might well be worth while to direct attacks on areas in Germany which have hitherto been comparatively unmolested," wrote the Committee, "in order to bring home to the whole population the consequences of military defeat and the realities of air bombing. Such attacks might make easier our task of establishing an orderly and firm occupation of those

parts of Germany falling within the Allied sphere."<sup>60</sup>

Following the German attack at the Bulge and the massive Russian counterblow on the Eastern Front, the Director of RAF Bomber Operations, Air Commodore S.O. Bufton, suggested to Air Marshal Sir Norman Bottomley, Deputy Chief of the Air Staff, on 22 January 1945 that the time was ripe for a reconsideration of *Thunderclap*. Bufton stated that the operation

... might well have the appearance of a close co-ordination in planning between the Russians and ourselves. Such a deduction on the part of the enemy would greatly increase the moral effect of both operations.<sup>61</sup>

The Joint Intelligence Committee reexamined *Thunderclap* in light of Bufton's statements, and on 25 January produced a report that concurred with the Air Commodore's beliefs. The destruction of Berlin, the committee felt, would not by itself bring a quicker end to the war. But the bombing of the German capital, timed to coincide with the Russian advance in the East, might yield decisive results. A raid of *Thunderclap* proportions on Berlin would cause great confusion by creating a flow of refugees out of Berlin that would collide with those refugees already fleeing the Russians and would prevent the movement of German troops to the Eastern Front.

Such a blow, amounting to the delivery of some twenty-five thousand tons of bombs by the Anglo-American bomber forces within four days and four nights, should, the Joint Intelligence Committee concluded, "materially assist the Russians in the all important battle now raging on the Eastern Front..." There might, the report said, even be a "political value in demonstrating to the Russians, in the best way open to us, a desire on the part of the British and Americans to assist them in the present battle."<sup>62</sup>

Portal, however, did not think the time was ripe for an attack of *Thunderclap*'s magnitude, as he did not believe its effects could be decisive. But Portal did say that the Allies should "use available effort in one big attack on Berlin, and attacks on Dresden, Leipzig, Chemnitz, or any other large cities where a severe blitz will not only cause confusion in the evacuation from the East but will also hamper the movement of troops from the West."<sup>63</sup>

Portal's reservations were to be overshadowed by one who often dabbled in military affairs — the Prime Minister. On the night of 25 January Churchill confronted the Secretary of State for Air, Sir Archibald Sinclair, and asked him what plans the RAF had for "basting the Germans in their retreat from Breslau."<sup>64</sup>

When Sinclair replied the following day that the RAF would continue to bomb oil targets unless bad weather allowed for raids on East German cities, Churchill snapped back, asking whether "... Berlin, and other large cities in East Germany, should not now be considered especially attractive targets."<sup>65</sup> Sinclair responded to the Prime Minister's second demand by ordering Harris to carry out the bombing of Eastern Front cities, a policy which the head of Bomber Command had already suggested.<sup>66</sup> Sinclair then wrote Churchill, who made no further comment.<sup>67</sup>

Portal and Bottomley both discussed Bomber Command's intentions with General Spaatz before the former left for the Malta Conference. As a result of this discussion, and a subsequent meeting between Bottomley and Spaatz after Portal had departed for the Mediterranean, a revised directive was issued from Malta for the Combined Bomber Forces on 30 January 1944. First priority under this revision to Directive Number 3 remained oil targets, but next came "Berlin, Leipzig, Dresden, and associated cities where heavy attack will cause great confusion in civilian evacuation from the east and hamper reinforcements."<sup>68</sup> The communications in the Ruhr-Cologne-Kassel area were given third priority.

On 31 January 1945, USSTAF Headquarters received a complete text of the new directive. By 2 February, Dresden was named alternative target for the Eighth Air Force in its scheduled raid on Berlin. The Russians were notified of Dresden's selection as a target city via the U.S. Military Mission in Moscow on 2 February.<sup>69</sup>

At Yalta, however, the Russians made no mention of the coming attack on Dresden. General Antonov, the Soviet Chief of Staff, stated on 4 February that one of the Russian wishes was:

By air action on communications hinder the enemy from carrying out the shifting of his troops to the east from the Western Front, from Norway, and from Italy.

In particular, to paralyze the junctions of Berlin and Leipzig.<sup>70</sup>

Most historians assume that Antonov was asking for Anglo-American air power "to paralyze the junctions of Berlin and Leipzig," as the Russians had no real strategic air force capable of accomplishing a "paralysis." But this was to be the only time during the Yalta Conference that the Russians specifically "requested" Allied air support. Even as Antonov made his statement he was probably aware of the American attack on Berlin the previous day, as Maj. Gen. S.P. Spaulding, Acting Chief of the U.S. Military Mission in Moscow during Deane's absence in Yalta, had

informed Maj. Gen. N.V. Slavin, Assistant Chief of Staff of the Red Army, on 31 January of the American intentions to bomb the German capital. Spaulding further informed Slavin on 2 February that Dresden was the alternate target for the Berlin attack.<sup>71</sup> Antonov's statement served only to legitimize, in the minds of the Allied air planners, those raids which had already been ordered as a result of the change to Directive Number 3. The Russian general's remark would later serve as the basis for the supposed Soviet "request" to bomb Dresden in mid-February, as the Allied leaders construed the junctions of Berlin and Leipzig to include the other major points in the Berlin-Leipzig railway system, notably those of Dresden and Chemnitz. But regardless of Antonov's statement, the Allied air forces would have bombed the cities of Berlin, Leipzig, Dresden, and Chemnitz.

Gen. George Marshall replied on 5 February to Soviet Marshal Khudyakov, a deputy Commander of the Red Air Force, that the Eighth Air Force had carried out a massive assault against Berlin on 3 February and that it planned to conduct a similar attack against Leipzig. Khudyakov did not appear to be impressed, however, and went on to give a detailed summary of Soviet air operations which rivaled Marshall's description of the raid on Berlin.<sup>72</sup> On 6 February Marshall emphasized that better methods of liaison between the Russians and the Anglo-Americans must be attained, or else "the most powerful weapon of the war [Allied air power] would be denied its proper use in assisting the Russians."<sup>73</sup> Antonov listened to Marshall's summation and then replied "that the Soviets had a large number of aircraft themselves." He further reasoned, "If all the targets to the east of the [bomb] line were made available to the Allied air forces, there would be nothing left for the Soviet forces to attack."<sup>74</sup>

Instead of improving the relations of the Allied and Soviet commanders regarding air operations, Yalta served to heighten the animosity between the different commanders. Gen. John Deane, in charge of the American Military Mission in Moscow, blamed the Russians for the lack of agreement between the two parties. "The whole story of collaboration in the air operations of the United States and the Soviet Union," wrote Deane, "is one of American initiative and Russian resistance."<sup>75</sup>

The American raid on Berlin to which Marshall continually referred at Yalta was made by almost 1,000 B-17s on 3 February 1945. Most of the bombs were dropped visually upon the center of the city, destroying a large number of government buildings and killing 25,000 civilians. The Reichschancellery, Air Ministry, Foreign Office,

Ministry of Propaganda, and Gestapo Headquarters all were claimed hit in this raid, which saw 21 B-17s lost to flak. The raid was originally scheduled for 2 February, but had to be postponed a day because of rainy weather over the continent.<sup>74</sup> Spaatz had ordered this raid prior to the 30 January amendment of Directive Number 3. On 1 February, Gen. James Doolittle, commanding the Eighth Air Force, wired Spaatz asking

Is Berlin still open to air attack? Do you want priority oil targets hit in preference to Berlin if they definitely become visual? Do you want center of City in Berlin hit or definitely military targets, such as Spandau, on the Western outskirts?

The USSTAF Commander's reply was terse. Spaatz told Doolittle to "hit oil if visual assured; otherwise, Berlin — center of city."<sup>75</sup>

At first glance, Spaatz's response appears to be totally inconsistent with the American doctrine of precision bombing. But that is not the case, for by February 1945 the American dogma of precision attacks had become radically altered from what it had been when B-17s first bombed Europe in August 1942. The attack on Berlin was indeed a precision raid, but its target — the principal Nazi governmental buildings — was located in the most densely populated part of the city. By carrying out such precision attacks on targets where the results also would be felt by the German civilian, Spaatz believed that unconditional surrender could be hastened by the double effect of the raids. But the primary emphasis remained on bombing targets militarily important to the German war effort. Indiscriminate bombing was authorized only when weather conditions precluded the location of a specific target. It was then allowed for two reasons: (1) to continue the daily bombing campaign against the Reich; and (2) to prevent the heavy bombers from landing with bombs still on board.<sup>76</sup>

On 12 February 1945 the Allied air commanders finalized plans for the attack on Dresden. The Eighth Air Force was to attack the city's marshalling yard on the 13th at noon, and a two-wave RAF assault against the city itself would follow during the night. But the next day clouds and rain prevented the Eighth from taking off, and the American and British planners decided that the RAF night raid would be the first assault, and that the proposed Eighth Air Force attack would be delayed until the following day, 14 February.<sup>77</sup> In the late afternoon of 13 February, the crews of 245 Lancasters climbed into their planes, and the mission began.

**T**HE February raids against Dresden were not a special attempt by the

Allies to force a German surrender through a massive terror attack. *Thunderclap*, either in its original version of August 1944 or in its revised version of January 1945, was never carried out. Had it been used against Dresden, the city's casualties would have probably been far in excess of 35,000. The Dresden raid likewise was not the result of a Russian request for assistance. Instead, the February attacks were the logical culmination of the course embarked upon by the Combined Bomber Offensive in the autumn of 1944.

... The confusion of Anglo-American aims which characterized ... [the] concluding months of the war made, at the last, a round-the-clock area offensive against what was left of German's cities almost inevitable; inevitable, that is, given the doctrine of unconditional surrender, the frustration of seeing Eisenhower's armies grind to a halt late in 1944 — and the new menace of a Red Army sweeping across half Europe.<sup>80</sup>

Although the Eighth Air Force did not engage in an "area offensive," as did the British, the Americans had nevertheless begun bombing targets which would cause a maximum of civilian discomfort, as can be seen from the 3 February raid on Berlin. For the British, Dresden was a "typical" area attack. The mission was flown and the target area was selected in essentially the same manner as in the "thousand-plane" raids of 1942.

Dresden did suffer severe damage in the attacks, but its total of casualties was not unique. In one raid by the British during their giant campaign against Hamburg in the summer of 1943, the RAF inflicted 42,000 deaths — 7,000 more than resulted from all four attacks on Dresden.<sup>81</sup> The Eighth Air Force's Berlin assault killed 25,000 people. All of the cities named in the revision to Directive Number 3 — Berlin, Leipzig, and Dresden — were bombed by the Allies during the month of February 1945. Leipzig was bombed on 27 February. Chemnitz, though not named in the revised directive but mentioned by both Portal and Harris after they read the J.I.C. report of 25 January, was attacked on 15 February.

The planning that went into the Dresden raids was little different from that which preceded other missions. That Directive Number 3 was altered prior to the attacks was not unusual; the priority target listing changed many times during the war to accommodate new situations. Churchill's insistence that cities in East Germany be bombed was also an ordinary request, as "... Mr. Churchill always participated with the British Chiefs in the formulation and dispatch of instructions, even those that were strictly military, sometimes only

tactical in character."<sup>82</sup> Both Portal and Spaatz approved the plan of attack on Dresden, and Harris and Doolittle received the specific word to attack the city through the usual channels of communications.<sup>83</sup>

The attacks upon Dresden probably will be a focal point of controversy for years to come. However, it is not to the specific bombing of the Saxon capital that this dispute should be directed.

... The question is not whether the bombing of Dresden was requested by the Russians, whether its destruction hastened the defeat of Germany, or even whether the attacks were necessary to bring victory. ... There remain, however, two questions: whether these bombing attacks against all German cities represented the best use of strategic air power and whether bombings of cities were ever justified.<sup>84</sup>

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In its forty-two years of existence, the airplane had emerged from a mechanical oddity into a machine possessing the capability of bringing the theories of Douhet, Trenchard, and Mitchell to fruition. The Industrial Revolution, which had indirectly led to the invention of the airplane, led directly — for a nation or group of nations espousing the doctrine of unconditional surrender — to the selection of one of the flying machine's targets: the industrial city. By destroying the industrial city, two aims, the Allied planners believed, could be simultaneously accomplished: the crippling of the enemy's war making ability, and the breaking of the enemy civilian's will to continue fighting.

In the winter of 1944, with the Allied ground offensive stymied, strategic bombing appeared to be the best — if not the only — way to secure an unconditional victory. The Combined Bomber Offensive was intensified to a 'round-the-clock' campaign; Dresden became only one of many cities to feel the weight of the daily Allied assault. Whether this effort significantly altered the outcome of the war remains debatable. However, the attacks against Dresden and the other cities of the Third Reich did go far toward proving historian Arnold Toynbee's grim assertion of the nature of warfare in the 20th century: "In the Western World under existing technical and social conditions, there can be no warfare that is not internecine."<sup>85</sup>

#### REFERENCES

The Manuscript Collections of the National Archives, Washington, D.C., are cited by the letters NA, followed by the number of the appropriate Record Group. "AFCHO Film Documents" refer to the microfilm documents reproduced from the Air Force Archives at Maxwell Air Force Base and filed with the Air Force Office of History, Washington, D.C.

1. Arnold J. Toynbee, *War and Civilization* (New York: Oxford University Press, 1950), 16.

2. Despite the totals of 526 and 550 given by U.S. Strategic Bombing Survey notes ("Target Records Prepared by SHAEF," Feb. 1945, NA, 243, 1, 3a90) and AFCHO Film Document No. 512.63146, respectively, for the two raids by the RAF, the most accurate figure appears to come from "RAF Daily Summary of Bomber Command Operations," 1 Jan. 1945-28 Feb. 1945, NA, 243, 1, 4, 2N(3)(2). This final source lists 805 aircraft dispatched on two sorties, of which 768 actually completed the mission. Shortly after 2100 on 13 February, 235 Lancasters and 9 Mosquitoes attacked with the first wave; 524 Lancasters bombed in the second wave around 0130 on 14 February.

3. *United States Strategic Bombing Survey* (herein referred to as USSBS) *Area Studies Report* (Washington: 1945), 17a. Dresden had a prewar population of 786,651. It was tenth largest in percentage of industrial workers in comparison with other German cities, eleventh in value of its industrial production. The number of industrial workers in the city totaled 118,683.

4. AFCHO Film Document No. 512.63146.

5. See Meldon E. Smith, Jr., "The Bombing of Dresden Reconsidered: A Study in Wartime Decision Making," (Ph.D. diss., Boston University), for an excellent account of all phases of the Dresden attacks. It is possible, however, that 1JD, NJG 10, may have attempted interception on the bombers' return route. Note AFCHO Film Document No. 512.63146.

6. "Bomber Command Summary of Operations."

7. Field Order No. 629, found in Mission Reports of the Ninety-Second Bombardment Group, mission no. 391 (NA, 18).

8. "Immediate Interpretation Report No. K. 4020 — Dresden, Germany," 18 Mar. 1945, NA, 243, 1, 4, 3.2(746).

9. See "Immediate Interpretation Report S.A. 3207 — Damage Assessment Photographic Intelligence Report of Dresden, Germany," 15 Feb. 1945, NA, 243, 1, 4, 3.2(746).

10. Smith, 31. These were 12 groups from the First Air Division of which originally 461 planes had set out to bomb the city. Smith also states that 361 fighters escorted the bombers and strafed targets in the city and along the route. Joseph W. Angell on page 3 of "Historical Analysis of the 14-15 February 1945 Bombings of Dresden," a study written for the U.S. State Department during the 1950s, comments that 316 B-17s bombed Dresden with 487.7 tons of high explosives and 294.3 tons of incendiaries. These numbers differ slightly from 424 tons of high explosive bombs and 265 tons of incendiaries found in AFCHO Film Document no. 506.55A. (Angell's treatise can be found in the Army Library of the Pentagon.)

11. Angell, 3. The yards were attacked by 211 B-17s dropping 466 tons of high explosives, a figure which compares favorably with that found in Wesley F. Craven and James L. Cate, *The Army Air Forces in World War II*, III (Chicago: University of Chicago Press, 1951), 732.

12. Smith, 36-41.

13. *Ibid.*, 268. Dr. Smith's painstaking research in this, his doctoral dissertation

for Boston University, makes this figure the most believable. In 1966, Dr. Smith visited Walter Weidauer, Dresden's Mayor at the time of the raids. Weidauer stated the death toll was 35,000 — 32,000 being interred following the bombing and another 3,000 being later found in the ruins. This figure is also supported by Forrest C. Pogue in *George C. Marshall: Organizer of Victory, 1943-1945* (New York: The Viking Press, 1973), 664, and Max Seiderwitz's *Zerstörung und Wiederaufbau von Dresden* which was published in Berlin in 1955 and sanctioned by the East German government.

14. The *Svenska Morgenbladet* reported the number of killed as 100,000 and stated two and one-half million people were in Dresden at the time of the raids, though it is more probable that between one-half and one million persons were in the city when it was bombed. See AFCHO Film Document No. 506.55A.

15. Smith, 250.

16. AFCHO Film Document No. 506.55A. However, Pogue states in his footnotes to *Marshall* on p. 664 that the East German authorities stated in 1966 that 350,000 persons were rendered homeless and permanently evacuated. The East German report further listed casualties by 10 March 1945 — which includes another raid on the marshalling yards by the Eighth Air Force on 2 March — as 18,375 dead, 2,212 seriously injured, and 13,918 slightly injured.

17. Angell, 4-5.

18. *Ibid.*, 5. Angell cites Craven and Cate, *The Army Air Forces in World War II*, and Webster and Frankland, *The Strategic Air Offensive against Germany, 1939-1945*, as the source of these figures; however, upon checking these references, one finds no mention of the number of factories or industrial workers in Dresden.

19. AFCHO Film Document No. 519.1622, report from the British Air Ministry to the United States Strategic Air Forces (USSTAF) Headquarters.

20. "U.S. Military Mission in Moscow Liaison with the Soviets," 1 Jan. 1945 — 28 Feb. 1945, NA, 334. The Soviets were usually informed in remarkably short time of USSTAF bombing policy decisions.

21. "Interpretation Report S.A. 3587 — Attack on Dresden Marshalling Yard on 17 April 1945," 18 Apr. 1945, NA, 243, 1, 4, 3.2(746).

22. This is an interesting statement in light of Grierson's endorsement of a recommendation in October 1944 to initiate attacks against Germany solely for the purpose of causing a collapse of her civilian morale and thus ending the war. See note 59. The text of Grierson's statement can be found in Memo UA 64471, Spaatz to Arnold, 19 Feb. 1945, in the Spaatz Collection of the Library of Congress (Box 20, Personal Folder for February 1945.) This report, written by Spaatz's Deputy Commander of Operations, Maj. F.L. Anderson, was sent to Arnold in response to Arnold's query of the Cowan article.

23. Incoming Message 39722, Arnold to Spaatz, 18 Feb. 1945, found in the Spaatz Collection, Box 20, Personal Folder for February 1945. The article ended by saying, "The reaction of the Germans . . . is expected to be a new outburst of violent words, but there is little more the Nazi

propagandists can say — all previous allied air raids on the Reich have been described as 'Terror Attacks'."

24. The situation's gravity is reflected by Col. Rex Smith, who sent Spaatz the text of the Cowan article for Arnold (see footnote 23). Wrote Smith, "Elmer Davis called while I was writing this message asking my opinion on whose authority the change of policy was made. What do we say? This is certain to have nationwide serious effect on the Air Forces as we have steadfastly preached the gospel of precision bombing against military and industrial targets." Note Incoming Message 39730, Arnold to Spaatz, 18 Feb. 1945, found in the Spaatz Collection, Box 20, Personal Folder for February 1945.

25. Previously cited Memo UA 64471 in the Spaatz Collection. This reply to Arnold, as before stated, was written by F.L. Anderson. Spaatz was away in the Mediterranean at the time, and Anderson admirably handled the General's correspondence during this most difficult period. Col. Alfred R. Maxwell, Anderson's Director of Operations, also wrote to Arnold for Spaatz concerning the disparity of directives. In UA 64462, 18 Feb. 1945 (Spaatz Collection, Box 20) Maxwell stated, "It has always been my [Spaatz's] policy that civilian populations are not suitable military objectives. . . . Bottomley's Directives [Sir Norman Bottomley was Deputy Chief of the British Air Staff] and mine, although generally parallel in priorities and issued after mutual consultation, often reflect the difference in capabilities of the two forces. On this occasion, I did not issue a complete new directive since it was necessary only to change the emphasis within the priorities of Directive Number Three. . . . My instructions to the Eighth Air Force as of Three Zero Jan are essentially paraphrased as follows: Since attacks visually on oil are First Priority, anticipate that bombing of targets in Berlin will be by Pathfinder methods. Bombing of Berlin at this time takes Priority after visual bombing of major synthetic plants, in the Leipzig [sic] area particularly, with next Priority to lines of communication in the Cassel-Ruhr-Cologne area." Directive Number Three included in priority number two the attack of German cities for the expressed purpose of causing confusion in civilian evacuation from the east. Possibly Cowan knew of this addition to the directive.

26. "Memorandum for the Secretary of War on the Bombing of Dresden," Marshall to Stimson, 6 Mar. 1945, NA, 165, 384.5. This part of the report was written by Brig. Gen. Joseph Loutzenheiser of Arnold's staff.

27. *Ibid.* This part of the report, however, was apparently written by Marshall. Originally Loutzenheiser drafted the entire memorandum, but Marshall kept only the first paragraph in the final memo sent to Stimson. See Pogue, p. 546. Pogue presents a very convincing portrait of the Army Chief of Staff during this crisis period.

28. This is not to imply in any manner that Marshall knew of the Eighth Air Force's difficulties on 14 February and tried to hide them from Stimson. The photographic intelligence reports, it appears, were sent directly from Spaatz to the Secretary of War in April (reference Pogue, 546), and though they most probably

were also held by Arnold, the possibility does exist that they bypassed Marshall. However, the source of the Chief's statement to Stimson concerning the 14 February raid remains a mystery.

29. "Memorandum for the Commanding General, Army Air Forces," from Col. Frank McCarthy of the General Staff Corps, 6 Mar. 1945, NA, 165, 384.5.

30. Pogue, 545-546.

31. In Robert C. Batchelder, *The Irreversible Decision 1939-1950* (Boston: Houghton Mifflin Company, 1962), 177. American response to the firebombing of Japan emphasized the apathy shown by the American public to the direct attack upon civilians. Writes Batchelder, "The government did not hail the shift as a new policy; there was no outcry in the press; churchmen made no noticeable protest. Apparently the American people had become so accustomed to news of destruction that they did not realize that America's cherished doctrine of precision bombing had been abandoned and the policy of obliteration bombing had taken its place. The obliteration bombing of cities was accepted as a logical, normal, and routine part of accomplishing the defeat of Japan." (184)

32. Arthur Harris, *Bomber Offensive* (New York: The Macmillan Company, 1947), 242.

33. See Sir Charles Webster and Noble Frankland, *The Strategic Air Offensive against Germany, 1939-1945*, III (London: H.M.S.O., 1961), 112. Churchill reconsidered this statement and later sent Ismay a new memorandum, which was low-keyed and in which Dresden was not mentioned. However, the fact remains that the Prime Minister had second thoughts about the raids.

34. Russell F. Weigley, *The American Way of War* (New York: MacMillan Publishing Company, Inc., 1973), 364. This raid of 334 B-29s flying low-level killed 83,793 persons, more than the great RAF raid against Hamburg and the American atomic attacks against either Hiroshima or Nagasaki.

35. Angell, 1.

36. *Ibid.*, 12.

37. David Irving, *The Destruction of Dresden* (New York: Holt, Rinehart, and Winston, 1963), 210.

38. See Raymond H. Fredette, *The Sky on Fire* (New York: Holt, Rinehart, and Winston, 1966) for an in-depth account of German aerial operations against Britain during World War I.

39. Giulio Douhet, *The Command of the Air* (New York: Coward-McGann, Inc., 1921, 1942), 58. Douhet went on to say that following an air raid upon a city, "even if a semblance of order remains, even if some work can be done, would not the sight of a single enemy airplane be enough to stampede the population into panic? In short, normal life would be impossible in this constant nightmare of imminent death and destruction."

40. Noble Frankland, "Bombing: The RAF Case," *History of the Second World War: Part 79* (London: BPC Publishing Ltd., 1966), 2186. Frankland's article examines the background and history of the Combined Bomber Offensive, probing in detail the motives behind the February raids on Dresden.

41. See "The Aim in War," a lecture given in 1936 by 1st Lt. H.S. Hansell, in the Hansell papers, Box 20, on file at the U.S. Air Force Academy. Hansell was later to be most influential in the formation of Army Air Force bombing doctrine in World War II, as he was one of the four officers who worked on AWP-1. He also commanded the XXI Bomber Command in the Pacific prior to Curtis Lemay. Hansell was not, however, the only advocate of American strategic bombing designed to destroy enemy will. Two years before Hansell's speech, Capt. Harold Lee George, who also taught at the Air Corps Tactical School, said the following concerning the objectives of air power. "Air power finds its objectives not only in the hostile land, sea, and air forces, but also in the economic, social, and political life of the enemy. . . . Civilization has rendered the economic and social life of a nation increasingly vulnerable to attack. Sound strategy requires that the main blow be struck where the enemy is weakest." See "Air Force Objectives," a lecture given in 1934 by Capt. Harold George, in the Hansell papers, Box 4.

42. The United States officially protested the Japanese attacks, and after the bombing of Nanking in 1937 wrote the following declaration to Tokyo. "This Government holds the view that any general bombing of an extensive area wherein there resides a large populace engaged in peaceful pursuits is unwarranted and contrary to the principles of law and humanity." See Batchelder, 172.

43. In the attack on Guernica on 26 April 1937, some 1,600 people were killed and 900 wounded out of the town's 7,000 inhabitants. See Robert T. Elson, *Prelude to War* (Chicago: Time, Inc., 1976), 172.

44. Oliver Lyman Spaulding, *Ahriman: A Study in Air Bombardment* (Boston: World Peace Foundation, 1939), 92-93. A London observer, Major MacRoberts, who was in Barcelona in 1938, concurred with Ambassador Bowles' statement. MacRoberts commented, "There has been no stampede in mass of the whole of a nerve-racked population. No wild and unreasonable panic. No terrible and uncontrolled hysteria and certainly no thought of beseeching the Government to seek an immediate and unconditional peace." See Hilton P. Goss, *Civilian Morale under Aerial Bombardment 1914-1939* (Maxwell Air Force Base: Documentary Research Division, Air University Libraries, Air University, 1948), 246.

45. In fact, during 1940 the total admissions to mental hospitals in London were slightly less than in 1938, and the number admitted decreased even further in 1941. Note Irving L. Janis, *Air War and Emotional Stress* (New York: McGraw-Hill Book Company, Inc., 1951), 74.

46. Hans Rumpf, *The Bombing of Germany* (New York: Holt, Rinehart, and Winston, 1963), 19. Chamberlain made this statement to the House of Commons in a speech on 14 Sept. 1939.

47. Bomber Command attacked Freiburg on 11 May 1940, the date of the German breakthrough at Sedan. See Hoffman Nickerson, "The Folly of Strategic Bombing," in *Ordnance*, Jan.-Feb. 1949, 247. Nickerson's article is an opinionated review of J.F.C. Fuller's *The Second World War — A*

*Strategic and Tactical History*, both of which ultimately state that sea power contributed the most to Allied victory in World War II. Nickerson further points out that Churchill had been in office exactly one month at the time of the Freiburg raid, and hints that the order for the attack originated with Churchill. See also "The 1940 Bombing of Freiburg: Fuller and the Writing of Military History," by W. Kent Hackman, Sept. 1978, *Aerospace Historian*, 155.

48. David Divine, *The Broken Wing* (London: Hutchinson, and Company, Ltd., 1966), 244.

49. See "Air Ministry Conference," 5 June 1945, NA, 243, 1, 31g.

50. Webster and Frankland, I, provides an excellent description of the evolution of RAF bombing policy.

51. Rumpf, 48.

52. Fred C. Ikle, *The Social Impact of Bomb Destruction* (Norman: University of Oklahoma Press, 1958), 30.

53. *USSBS Area Studies Report*, 4; also see "RAF Area Attacks," NA, 433, 1, 31g.

54. Ikle, 31. However, Albert Speer, Hitler's war production genius, stated: "I often wondered why the Royal Air Force Bomber Command did not continue their one thousand-plane raids on our cities. Had they been able to do so the morale of the German population and the German labor force might have been significantly weakened." See Ira Eaker and Arthur G.B. Metcalf, "Conversations with Albert Speer," *Air Force Magazine*, Apr. 1977, 53. "Conversations" is the text of a 21 Oct. 1976 discussion with Speer by Eaker and Metcalf at the Heidelberg home of Speer.

55. For the manner in which this theory evolved at the Air Corps Tactical School, see David MacIsaac, *Strategic Bombing in World War Two* (New York: Garland Publishing Co., Inc., 1976), 4-10. The four officers who prepared AWP-1 were Col. Harold L. George, Lt. Col. Kenneth N. Walker, Maj. Lawrence S. Kuter, and Maj. Haywood S. Hansell. In addition to the three primary objectives of the plan, the group also listed an "intermediate objective" as the need to overcome the German fighter defenses. See Hansell's *The Air Plan that Defeated Hitler* (Atlanta: Higgins-McArthur/Longino & Porter, 1972), 61-99, for an excellent description of the tedious planning process. The restricted means available to the Air Corps had much to do with the employment of a precision theory.

56. Webster and Frankland, III, 273. Targets were listed in order of priority as follows: (1) German submarine yards; (2) the German aircraft industry; (3) transportation targets; (4) oil plants; (5) other war industry targets.

57. When poor weather conditions existed over the target, as in the Eighth Air Force February attacks on Dresden, the target was bombed "blind" using H2X radar. But this technique produced "an average circular probable error of about two miles . . . which meant that many of its [the Eighth Air Force's] attacks depended for effectiveness upon drenching an area with bombs." Anthony Verrier, *The Bomber Offensive* (London: B.T. Batsford Ltd., 1968), 253.

58. MacIsaac, 78.

59. See Webster and Frankland, III,

50-56, for a concise description of *Thunderclap's* evolution.

60. One of the authors of this Joint Intelligence Committee report was Air Commodore C.M. Grierson. See G.C. McDonald papers, Box 12, Folder 1, on file in the U.S. Air Force Academy Library.

61. Webster and Frankland, III, 99.

62. *Ibid.*, 100.

63. *Ibid.*, 103.

64. *Ibid.*, 101.

65. *Ibid.*, 103.

66. *Ibid.*, 100. After hearing of the J.I.C. report of 25 January, on that same day, Harris suggested that the primary attack on Berlin be supplemented with raids on Chemnitz, Leipzig, and Dresden, cities that would also contain refugees and which were important to the German communication network.

67. The exact wording of Sinclair's second memo to Churchill was: "The Air Staff has now arranged that, subject to the overriding claims of attacks on enemy oil production and other approved target systems within the current directive, available effort should be directed against Berlin, Dresden, Chemnitz, and Leipzig and against other cities where severe bombing would not only destroy communications vital to the evacuation from the East but would also hamper the movement of troops from the West." This statement by Sinclair parallels almost exactly that made by Portal upon reading the J.I.C. report of 25 January. See Webster and Frankland, III, 104.

68. This change to Directive Number 3 had the approval of both Spaatz and Marshall. The desire to attack Berlin fit neatly into the USSTAF commander's plans — he had already given orders to the Eighth Air Force to attack the city. Marshall also concurred with the change as long as the Russians were notified prior to the attacks. The Chief of Staff stated to General Kuter, who was to represent the Army Air Forces at Yalta, that "in connection with our attacks on Berlin and associated cities attacks on Munich would probably be of great benefit because it would show the people that are being evacuated to Munich there is no hope." See AFCHO Film Document No. 519.523, USSTAF MAIN-IN 15172, dated 1 Feb. 1945. For a comparison of the British and American opinions toward the change in Directive Number 3, see Webster and Frankland, III, 104-105, for the British

viewpoint and Craven and Cate, III, 725, for the American.

69. Reference AFCHO Film Document No. 519.1622 (S 77217 dated 31 Jan. and D 61064 dated 2 Feb.). By 8 February Dresden had become second only to Berlin in "importance in relation to movements of evacuees from, and of military forces to, the Eastern Front." See AFCHO Film Document 519.1622, MSW 207, 8 Feb. and the following footnote.

70. *Foreign Relations of the United States Diplomatic Papers: The Conferences at Malta and Yalta* (Washington: 1955), 583.

71. See "Message from Spaulding to Slavin," 2 Feb. 1945, NA, 334, United States Military Mission to Moscow Records (Interservice Agencies), 1 Jan.-28 Feb. 1945.

72. *Ibid.*, 600.

73. *Ibid.*, 642.

74. *Ibid.*, 643.

75. John R. Deane, *The Strange Alliance* (New York: The Viking Press, 1947), 139. Deane also blames the Russians for the majority of disagreements which occurred during his stay in Moscow.

76. Craven and Cate, III, 725-726.

77. Spaatz papers, Box 23, Feb. 1945 (official). At the bottom of Doolittle's query Spaatz typed the following notation: "Replied by telephone conversation and told Doolittle to hit oil if visual assured; otherwise, Berlin — center of City. C.S."

78. For a discussion of indiscriminate bombing, see Craven and Cate, III, 668.

79. See AFCHO Film Document No. 519.1622, specifically dispatches D 61463 and D 61480, both dated 12 Feb., and dispatch D 60010, dated 13 Feb.

80. Verrier, 287. Dr. Noble Frankland concurs with Verrier's summation. Frankland writes: "Perhaps it may suffice to say that Dresden was the logical climax of the strategic air offensive against Germany, which as a whole played a major part in the defeat of Nazi hegemony; that it was dramatically more successful than could reasonably have been anticipated; and that, while it seemed to be urgently necessary at the time of its execution in the middle of February, it was possible to wonder as soon afterwards as the end of March how the Germans, then visibly and rapidly crumbling, could have merited such an ultimate punishment." See Frankland, 2197.

81. Frankland, 2189. Dresden was not among the thirty most heavily bombed

cities by the RAF or the thirty most heavily bombed cities by the Eighth Air Force. See "Theory of the RAF in the Bombing of the German War Industry," NA, 243, 1, 3, 31g.

82. Dwight D. Eisenhower, *Crusade in Europe* (Garden City: Doubleday and Company, Inc., 1948), 241. Churchill also has a significant part to play in pushing forward the Transportation Plan of the Anglo-Americans, which governed the bombing of road and rail targets in France prior to the Normandy invasion. See Verrier, 266.

83. See AFCHO Film Document No. 519.1622, MSW 207, 8 Feb., which lists Dresden as second to Berlin in importance as a communications target on the Eastern Front. This directive was sent both to the Headquarters of the Eighth Air Force and Bomber Command.

84. Pogue, 546.

85. Toynbee, 3.



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